A NEW SPECIES OF *POLYCESTA* FROM MEXICO (COLEOPTERA: BUPRESTIDAE)

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ABSTRACT

A new species of Buprestidae, *Polycesta barri*, is described from the states of Michoacan and Oaxaca, Mexico.

A remarkably slender *Polycesta* was collected in Mexico on the dead limbs of mesquite in the state of Michoacan and on an unidentified broadleafed tree in the state of Oaxaca. It is named in honor of a colleague and friend, Dr. W. F. Barr, University of Idaho, who has done much to advance our knowledge of this genus. He examined specimens and agreed that it is new.

Polycesta barri Nelson, **new species** (Fig. 1-6)

Body extremely slender; antennae serrate from fourth segment; lateral margins of pronotum rounded; second interval of elytra a strongly elevated costa, scutellar costa absent; elytral apices serrately truncate; color cupreous-black above and below, variegated with ferruginous above.

MALE: Head with front slightly convex but flattened in center; coarsely, rugosely punctate with irregular shaped callus on upper part, and moderately clothed with erect curved white setae; vertex with punctures smaller and with hairline median sulcus; clypeal margin transverse with slight arcuate emargination at middle; antennae short, segments serrate from fourth apically, segments 8 to 10 wider than long (Fig. 1).

Pronotal width to length ratio 1.6 to 1; front narrower than base; lateral margins rounded, widest at middle; anterior margin weakly lobed at middle; posterior margin truncately lobed before scutellum; surface coarsely densely punctate throughout; disk with median depression stronger at base, extending to anterior fourth; surface between punctures in part reticulated, in part shining; with few short inconspicuous white setae laterally.

Scutellum oval with middle of disk depressed.

Elytra 4.5 times longer than pronotum; at base narrower than greatest width of pronotum, then lateral margins expanded and remaining parallel to posterior of middle and converging toward apex where margins almost truncately turn toward suture; lateral margins serrate from middle, with several larger teeth nearer apex; epipleural fold with strong evenly arcuate lobe anteriorly; disk without scutellar costa; second interstrial space strongly elevated as costa from base to apex; interstrial space 4 weakly costate from base to apex, 6 from base to near apex, and 8 in apical half; each stria with single row of large closely set punctures; white setae inconspicuous, short, semirecumbent and sparse, a little longer along lateral margins. Ventral surface with punctures fine and sparse medially, larger and more dense laterally; sparsely clothed with short, semirecumbent white setae which are more numerous laterally; prosternum swollen anterior to procoxae, anterior margin feebly bilobed; hind margin of first abdominal sternite broadly, truncately lobed at middle; hind margins of sternites 2, 3, and 4 strongly prolonged at sides; last visible sternite broadly triangular with lateral margins slightly arcuate (Fig. 2); tarsal segments 3 and 4 each with broad membranous lobe beneath.

Male genitalia (Fig. 4, 5) with lateral plate-like structures of penis numerous, parameres similar in shape to many of the species from the United States.

Length: 13.5mm; width: 4.0mm.

FEMALE: Similar in most respects to male but differs as follows: slightly more robust; and last visible abdominal sternite more elongate and arcuately rounded (Fig. 3).

Length: 16.5mm; width: 4.7mm.

Holotype, male [California Academy of Sciences, Entomology, San Francisco], allotype, female [G. H. Nelson coll.] and paratypes, 2 males, 1 female, Mexico, Michoacan, 9 mi. S. Cuatro Caminos, 13-VII-72, G. H. Nelson; 2 males, same data except 12-VII-72; 1 male, same place, 20-VII-66, D. S. Verity; 7 males, 11 females, Oaxaca, 7 mi. W. Tehuantepec, 1-VII-72, G. H. Nelson; 1 female, Oaxaca, 5 mi. W. Tehuantepec, 3-VII-72, G. H. Nelson. The material from near Cuatro Caminos was on the dead limbs of *Prosopis juliflora* (Sw.) D.C., while the material from near Tehuantepec was on the dead limbs of an unidentified broad-leaf tree. Paratypes are

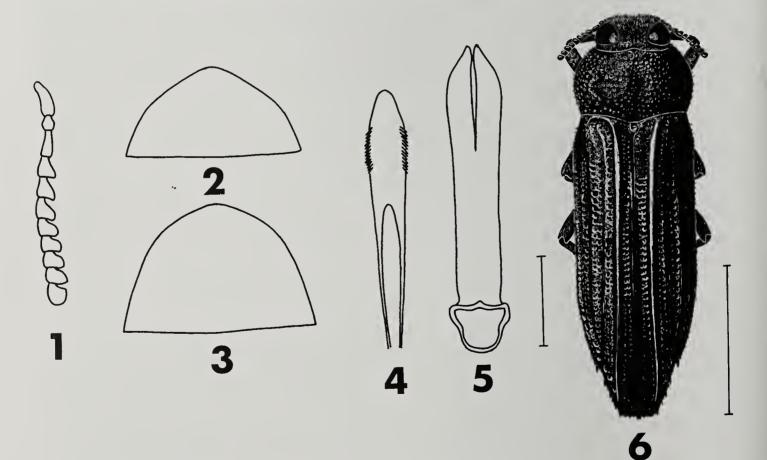


Fig. 1-6. Polycesta barri new species: 1) antenna of holotype; 2) last visible abdominal sternite of holotype; 3) last visible abdominal sternite of allotype; 4) dorsal view, penis of holotype; 5) dorsal view, parameres of holotype (line=1mm for Fig. 1-5); 6) dorsal view, holotype (line=5mm).

placed in the following collections: United States National Museum, W. F. Barr, F. M. Beer, G. H. Nelson, D. S. Verity, G. C. Walters, and R. L. Westcott.

There is variation in the distinctness of the ferruginous areas, and in some of the females the lobe of the first abdominal sternite is less distinct. The males vary from 13.0 to 17.0mm in length and from 4.0 to 5.0mm in width; the females from 13.7 to 19.0mm in length and from 4.2 to 6.0mm in width.

It appears most similar to P. variegata Waterhouse and P. bicolor Kerremans, but the extremely narrow form, rounded lateral margins of pronotum, squared apices and one pair of conspicuous discal carinae of elytra are features that will distinguish P. barri Nelson from other described species.

A NOTE ON THE OCCURRENCE OF SPAERIDIUM SCARABAEOIDES L. NEAR MEXICO CITY (COL., HYDROPHILIDAE)

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Late in 1974 (22-XI), when the dry season had started and the vegetation of the open fields in the Valley of Mexico was quite withered, a series of Hydrophilidae (8 males and 6 females) was found in fresh cow dung on artificially flooded pasture land. A few days later (1-XII-74) a thorough search was made in the surroundings, and a few scattered specimens (3 males and 4 females) were gathered in adjacent fields and ravines as far as 1.5 Km, also in fresh cow dung. The locality is part of the Delegación de Cuajimalpa, D.F., 18 Km to the southwest of downtown Mexico City; the altitude is 2550 m (8360 feet) and has an average temperature of 14°C. After collecting 35 years in the Valley of Mexico and 7 years in this particular area, it is the first time that I have found this attractive black beetle with red and orange spots. I determined it as *Spaeridium scarabaeoides* L. by using: H. Vogt (1971) Die Käfer Mitteleuropas, III:128-129.

This European species has been known from North America for many years; Edwards (1949) stated that it was quite common in the eastern U.S., and Hatch (1953) recorded it from Washington since 1913. He also listed *S. lunatum* F. (1926) and *S. bipustulatum* F. (1928) from the Pacific Northwest. Blackwelder (1944) listed *Spaeridium scutellatum* Sturm from Brazil, but no other species from Latin America. *S. scarabaeoides* L. probably was introduced into Mexico in all areas where dairy cattle were imported from the U.S.A., but it has been able to survive only where the climate is temperate.